



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

Notice of Decision - Bureau of Mining Regulation and Reclamation

Web Posting: 02/10/2014

Deadline for Appeal: 02/20/2014

**Klondex Gold & Silver Mining Company
Fire Creek Infiltration Project
WPC Permit No. NEV20130102**

The Nevada Division of Environmental Protection has decided to issue Water Pollution Control (WPC) Permit NEV2013102 (Permit) to Klondex Gold & Silver Mining Company (Klondex). This Permit authorizes the construction, operation, and closure of approved mine dewatering water management and monitoring facilities in Lander and Eureka Counties. The Division has been provided with sufficient information, in accordance with Nevada Administrative Code (NAC) 445A.350 through NAC 445A.447, to assure the Division that the waters of the State will not be degraded by this operation, and that public safety and health will be protected.

The Permit will become effective 25 February 2014. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to Nevada Revised Statute (NRS) 445A.605 and NAC 445A.407. All requests for appeals must be filed by 5:00 PM, 20 February 2014, on Form 3, with the State Environmental Commission, 901 South Stewart Street, Suite 4001, Carson City, Nevada 89701-5249. For more information, contact Tom Gray at (775) 687-9403 or visit the Division's Bureau of Mining Regulation and Reclamation website at www.ndep.nv.gov/bmrr/bmrr01.htm.

Written comments were received during the public comment period and oral comments were received during a 09 December 2013 public hearing, held in Crescent Valley, Nevada. The text of all comments, in some cases excerpted, and the Division responses (in *italics*), are included in this Notice of Decision below, listed in order of receipt. A summary of Permit revisions made since the 16 October 2013 Notice of Proposed Action follows the comments and responses.

1. Letter from Virgil and Joan Roper of Crescent Valley, Nevada, received 24 October 2013 via standard mail.

Comment 1.1: “...as homeowners who have a residential well located within the area that will be affected by the mine dewatering system, we wish to request a public hearing before the [final] determination regarding this permit.”

Response 1.1: The 09 December 2013 public hearing was held in response to multiple requests made during the public comment period. As a result, the end date for the public comment period was extended from 15 November 2013 to 12 December 2013.

Comment 1.2: “We have several concerns and questions as to how our well will be affected, if something should ‘go wrong.’ Our well is our only source of drinking water for us as well as our livestock and we do not believe that it is in the best interest of us and our neighbors, who also have [residential] wells and those of neighbors who wish to have wells drilled in the future, to risk contamination of our water source.”

Response 1.2: Analyses of alluvium collected near the proposed Rapid Infiltration Basin (RIB) site demonstrate that the RIBs, when constructed and operated as required in the Permit, will not degrade groundwater in downgradient wells. To verify this, the Permittee will construct three downgradient monitoring wells. The static water elevation at these three wells will be monitored monthly and the water quality will be analyzed quarterly.

2. Letter from Mark and Jennifer Sharkozy of Crescent Valley, Nevada, received 31 October 2013 via email.

Comment 2.1: “....My wife and I feel that not enough has been explained to us [in] the letter that we received from your office....what it doesn’t tell us is how it will affect my family and I by way of water quality when my water receives the dewatering water from the mine....it states that the water they put into the ground has to be drinkable but who’s to say that something does not go wrong with the filtration system occasionally.”

Response 2.1: There are a number of safeguards in place in the existing Fire Creek Exploration Permit (NEV2007104), in the subject Fire Creek Infiltration Permit (NEV2013102), and in applicable regulations, to protect the water quality in downgradient residential wells. If something goes wrong with the water treatment plant, the problem will be detected and corrected by the Permittee and also show up in the next required monthly analyses of treated water stored in tanks at the plant. If the treated water does not meet drinking water standards, the Permittee is not authorized to discharge it to the RIBs. If such water is inadvertently discharged to the RIBs, the Permittee would be required to report a Permit violation to the Division immediately and take approved actions to correct the problem.

Comment 2.2: “Even if the water is clean enough to be put into the ground, what is it going to flush into my well that isn’t normally there in high concentrations, and who will be responsible for that if this should happen.”

Response 2.2: Test results indicate that groundwater will not be degraded, as described in Division Response 1.2.

Comment 2.3: “We don’t feel that adding 4.2 feet more of water to the level of my well unnaturally is a good thing, especially if it is done in a sped up manner than natural means....this water supply is our only means of extracting to drink and run a full household including very young children....letting the mine dewater the mass amounts of water into our only available aquifer (only water source) would only make things worse....”

Response 2.3: Test results indicate that groundwater will not be degraded, as described in Division Response 1.2.

Comment 2.4: “We would like to formally request that a public hearing on this matter be addressed in Crescent Valley, NV....We are not scientists, geologists, or biologists, therefore we need to be given the [facts] in black and white, plain and simple, and possibly chart, maps, and pictures that could further explain what they are going to be doing.”

Response 2.4: Please see Division Response 1.1.

3. Letter from Joseph J. Moylan of Crescent Valley, Nevada, Edward J. Morris of Dayton, Nevada, and Kendall and Mary Spalding of Dayton, Nevada, received 31 October 2013 via email and facsimile.

Comment 3.1: “I Joseph J. Moylan, Edward J. Morris, Kendall & Mary Spalding residents of and/or land and property owners within the [affected] boundaries of the proposed...project...hereby request that a public hearing...be convened....in the town of Crescent Valley...inside the TOWN HALL....”

Response 3.1: Please see Division Response 1.1.

Comment 3.2: “1.if the water level is predicted to raise 4 feet at the CLOSEST well, then what is the water level predicted to be under State Route 306? According to the State Engineers Well Drilling Logs, [the] Static water levels under the surface in Sec 21 alone range from only 37 feet to 60 feet whereas one neighbor has a static water level of 97 feet that is only a few hundred yards west of our locations and in a direction toward the mine. Other Static Water levels in the area are only 23 to 28 feet....one such well drilled back in 1952 in Sec 27 had a static water level of only 15 feet....What are the

possibilities of any liquefaction or ground weakening and sink hole possibilities with that major supply route?”

Response 3.2: The groundwater model predicts a rise of only 1 foot under State Route 306. Liquefaction or sink holes are not considered likely. However, a prohibition against causing their formation has been added to Part I.G.7 of the Permit.

Comment 3.3: “....The notification (Notice of Proposed Action)...was ONLY mailed out to the Sharkozy residence....”

Response 3.3: The Division complied with the public notice requirements pursuant to NAC 445A.402. In addition, the Division mailed the Notice of Proposed Action to 16 downgradient well owners, as identified in the Nevada Division of Water Resources well log database.

Comment 3.4: “....The WPCP Draft on page 1, par 1 states ‘The Permittee is authorized to discharge and infiltrate, via rapid infiltration basins, up to 4,320,000 gallons per day of mine dewatering water.’ This equates to 129,600,000 gallons even though the NDEP has stated the 30 day average discharge rate shall not exceed 1500 gallons per minute or a total of 64,800,000 gallons per month. $129,600,00 \text{ gals} \times 12 \text{ months} = 1.55 \text{ billion gallons}$ of water annually, whereas, the 64,8 million gallons per month equates to 777.6 million gallons annually....if one were to construct a tank or a reservoir to hold that much (Monthly) water you would need one such of the size of a 4.5 story building 500 feet long and 385 [feet] wide, and you would need to construct 12 of these, one per month to handle the 777.6 million gallons of water annually.”

Response 3.4: The discharge rate limits in the draft Permit have been reduced from the quoted values. The resultant Permit includes two separate limits for different time periods: a maximum discharge of 2,160,000 gallons per day, and a maximum discharge of 43,200,000 gallons in any 30-day period. Therefore, the Permit authorizes up to 525,600,000 gallons to be discharged annually, which equates to a 1,000 gpm average for 365 days.

Comment 3.5: “....based upon the sheer volume of water potentially permitted, there is a concern of what this will have upon groundwater flow and possible effects such as sink holes, flooding, private well water contamination as well as what deposits lie underground between the RIBS and the wells. Where is this going to flow to? What is the expected contamination rates and to what degree....”

Response 3.5: The hydrologic modeling described in the Permit application predicts that the infiltrated water will flow to the east-southeast, forming a mound of saturation with a high point 63 feet below ground surface (bgs) near the RIBs. No surface expression of the infiltration is predicted. As noted in Division Response 1.2, test results indicate that groundwater will not be degraded. Part I.B.4 of the Permit has been revised to

require updates to the hydrologic model with every five-year Permit renewal and with any other Permit modification that may alter the model predictions.

Comment 3.6: “2. With regard to WPCP pg 4 par 3, I am curious how the NDEP or any other agency is going to enforce this provision or enforce the provision as is stated on the Klondex Fact Sheet pg 1 par A2, line 10? If is currently objectionable if the State is simply going to take the [operator’s] ‘word’ that the levels are within parameters.”

Response 3.6: The reference is to Part I.G.3 of the Permit, which prohibits degradation of surface water or groundwater above applicable water quality standards. The Division will review water quality data that the Permittee is required to submit in quarterly and annual monitoring reports. The water samples are collected by the Permittee and analyzed by a State-certified laboratory. If a violation is noted, the Division will determine the appropriate enforcement action to achieve a return to compliance and to protect waters of the State and downgradient users. The Division will also perform regular site inspections to ascertain compliance with the Permit and applicable regulations.

Comment 3.7: “3. With regard to WPCP pg 4 par 6, the water depth in the RIB floor limited to 3 feet above the floor itself and the flow to be managed, how is the mine operator going to manage the drainage rates and possible washouts of the hillside?...”

Response 3.7: There will be valves on the discharge pipeline to regulate the discharge rate, and a staff gauge mounted in each RIB to measure the standing water depth. The Permit requires daily monitoring of the gallons discharged and the water depth in each RIB. Each RIB will include a 2.5-foot thick riprap apron of coarse boulders on its floor surrounding the discharge pipe end to prevent erosion of the RIB floor and walls.

Comment 3.8: “...I would think that with a rib that contained roughly 2,160,000 gallons of water, this would tend to have a net vertical weight component of over 18,000,000 pounds, surely this must have some form of hydraulic pressure effect upon the underlying soil to which could move the immediate sediment areas outward and [downgradient] towards our residential and well locations....”

Response 3.8: The Division is not aware of such problems occurring at other permitted RIBs in the State and does not anticipate that they will occur at this project.

Comment 3.9: “4. WPCP pg 4 par 7, line 5, ‘...or other approved measures....’ What other approved measures? From what we see right now, there is a 4” pipeline that runs over the mountain and then crosses the road and connects to a large (approx. 18” to 20” pipe, with notches cut into it to act as a sort of sediment catch and drain or strainer, if you will, this is simply laying atop the surface in a natural drainage ditch. Is this one of those approved measures?”

Response 3.9: The reference is to Part I.G.7 of the draft Permit, which prohibits causing the formation of surface discharges, surface seeps, or artificial springs, or causing the subsurface infiltration mound to rise above specified depths. It goes on to state, “Regular drying cycles, a decreased discharge rate to the RIBs, or other approved measures shall be utilized as necessary to prevent, or mitigate for, exceedance of this Permit limit.” The term, “other approved measures” provides reasonable flexibility for the Permittee to propose methods to the Division to prevent, or mitigate for, exceedance of that Permit limit. It is uncertain which pipeline the commenter is describing, but it may be a previously approved, but no longer active, pipeline for temporary discharge to a dry tributary of Fire Creek.

Comment 3.10: “5. With regard to WPCP pg 6, par (2)(f) and further with the term ‘Arsenic,’ I am interested in what the current, if any, levels of tested arsenic are at the mine site...and then what affect, if any, the mass movement of water, will have upon stirring up any underground Arsenic, Salt Deposits, or any other substance that can be hazardous to health?...Safe Drinking water levels are at...10 Parts Per Billion.... Crescent Valley’s Town Water supply had to drill a new well in 2011 and install a new treatment facility for water testing in at 13.25 and 13.5 PPB....The permit covers sections for a water treatment facility. [If] the water levels are currently good or within levels, why is there a need for a WTF?”

Response 3.10: From the Fire Creek Exploration Project third quarter 2013 monitoring report, dated 28 October 2013, reported arsenic concentrations for calendar year 2013 are as follows: 0.011 to 0.250 milligrams per liter (mg/L) in untreated water from the Dewatering Pond, 0.020 to 0.470 mg/L in untreated water from the Stormwater Pond, 0.020 to 0.190 mg/L in untreated contact water pumped from the underground workings, 0.006 to 0.0098 mg/L in untreated water from Underground Containment Dam 1 (UCD-1), and less than 0.005 mg/L in treated water from the existing Fire Creek water treatment plant (WTP). The UCD-1 water and the treated water comply with the 0.01 mg/L drinking water standard and could therefore be discharged to the RIBs, but the water from the Dewatering Pond, Stormwater Pond, and the contact water from the underground workings would require treatment prior to discharge. As noted in Division Response 1.2, the permitted RIB discharge will not degrade waters of the State.

Comment 3.11: “6. From the Klondex Fact Sheet pg 1, par A2, line 1, ‘Dewatering water from underground mine workings and draindown water from a Waste rock Repository....’ [What] elements, minerals and/or chemicals if any, are a part of this activity that will end up or could remotely be contained within the water, or what chemical elements are within the draindown water that will all eventually be held and contained within this Underground Containment Dam that will be pumped to the surface for [eventual] discharge to the RIBs?...What is the source of this ‘Cleaner Water’ from the underground containment [dam] and then how is it ‘cleaner’ by the fact of it being within the [dam]?....”

Response 3.11: UCD-1 is a small pool of water in the underground workings that is isolated from the rest of the workings with a small concrete wall (dam). The UCD-1 water is cleaner than the other dewatering water, because it seeps into UCD-1 from the surrounding non-mineralized mine walls without contacting other mine workings or mine activities. The other dewatering water and the waste-rock drainage commonly exceed drinking water standards for some or all of the following constituents, because they have been in contact with mineralized rock, motorized vehicles, and/or mining activities such as drilling and blasting: aluminum, antimony, arsenic, chloride, fluoride, iron, manganese, nitrate, nitrite, sulfate, thallium, total dissolved solids, and total nitrogen. The WTP reduces these constituents to below drinking water standards.

Comment 3.12: “7. Klondex Fact Sheet pg 1, par A2, line 10 reads in part, ‘...precludes the formation of new surface water seeps or springs....’ How is this going to prevent new surface seeps and springs from forming near the private wells near and along Hwy 306 where the water tables are higher...?”

Response 3.12: Part I.G.7 of the Permit prohibits causing the formation of surface seeps or springs in any location as a result of the permitted activities. If such seeps or springs are caused to form, the Permittee must report a violation of the Permit to the Division and take approved action to eliminate the seeps or springs.

Comment 3.13: “The next couple of lines further state in part that ‘Degradation of the waters of the State is prohibited.’....I am curious how millions of gallons of water that is from underground mine workings by nature contaminated underground and then chemically treated and pumped into RIBs, and then mixed with unknown quantities of unknown elements under the surface that by its nature MUST be presumed to contain unknown levels of arsenic..., salts, and other various minerals, could possibly be safe or cleaner than the existing well water that has none of this and is by far much more superior in taste and quality [than] the Crescent Valley [Town] Water Supply....”

Response 3.13: Please see Division Responses 3.10 and 1.2.

Comment 3.14: “What actions can or WILL be taken to ensure such regulations are followed. If such is in the form of fines, unless those fines are of a substantial nature they will have little to no [effect] at all of enforcing compliance I fear.”

Response 3.14: Enforcement actions may include a variety of requirements for corrective action, monetary penalties, and, in some cases, required cessation of operations. The Division is authorized to assess monetary penalties up to \$25,000 per day per violation.

Comment 3.15: “8. Klondex Fact Sheet, pg 2, par 2, last 3 lines. ‘UCD-1 water generally meets all Profile I reference values and therefore does not generally required treatment prior to discharge. THE UCD-1 Pipeline bypasses the WTP and joins the RIB

discharge pipeline at a wye near the Permeate tanks.’ This here, I submit, is as close to a prima facie statement that one could desire to see as a mine operator [who] wishes to save a tremendous amount of money on any treatment process and simply declare that all of this water is by virtue clean and safe, pencil whip the data sheets and now there is no need for water treatment....The US EPA also has a...Integrated Source Water Protection Program. I would be interested in hearing more of these programs and I have every intent on filing any necessary documents or paperwork for institution of such if necessary.”

Response 3.15: Comment noted.

Comment 3.16: “9. With regard to Klondex Fact Sheet, pg 2, par 4, it would be appreciated if there could be some explanation to the terminology with this paragraph. At the first reading it leaves one that is not familiar with the art of geology to understand that there is only 340 feet of alluvium for drainage and the remaining 270 feet is bedrock. And further down in the paragraph that five shallow geotechnical boreholes drilled near the RIB intercepted alluvium to a max. depth of 100 feet below ground surface....This leads one to believe that there is only 100 feet of material to facilitate rapid infiltration and then water will move horizontally....”

Response 3.16: At monitoring well GW-3, approximately 2,500 feet southwest of the RIB location, 340 feet of alluvium overlie at least 270 feet of basaltic bedrock. At GW-3, the alluvium is dry and the water table is within the basaltic bedrock. The five geotechnical boreholes drilled near the RIB location were drilled to depths ranging from 30 to 100 feet bgs, and they encountered dry alluvium only, but the thickness of alluvium below the bottom of those boreholes is unknown.

Comment 3.17: “10. Klondex Fact Sheet, pg 2, par 4, and pg 3, par 2, speak of the location of GW3 and the RIB location and the elevations. The par on pg 2 says the RIBs are to be constructed at a static elevation of 5,250 MSL [sic]. On pg 3, par 2, states that NO groundwater was present at the maximum drilling depth of 100 feet below ground surface near the ribs [sic]. It then states...that static water was found in GW3 which has an elevation of 4884 MSL [sic] and that this water level is 479 feet below ground surface. It then goes on to state that the water west of the RIBs comes from much higher up at an elevation near 5600 to 5800 MSL [sic]. This would suggest that there is a definite separation of groundwater and that the mine would be removing water from one SOURCE and then diverting it into another SOURCE. As if there is a sort of collection bowl and/or natural barrier already preventing flow.”

Response 3.17: The baseline groundwater elevation at the RIB location will be established when monitoring well GW-4 is installed nearby, but it is likely lower than the groundwater elevation at GW-3, because the RIB location is downgradient from GW-3. However, both GW-3 and the RIB location are east of, and downgradient from the foothills of the Shoshone Mountains. In the Shoshone Mountains groundwater elevations are significantly higher than at GW-3, as noted in the comment, but the

existing wells where the groundwater elevation data have been obtained are too widely spaced to indicate whether there is a hydrologic barrier (e.g., a fault), or just a gradual eastward slope of the groundwater surface, between the Shoshone Mountains and monitoring well GW-3.

Comment 3.18: “11. Klondex Fact Sheet, pg 3, par 3, Says that Fire Creek Mine is fed by multiple springs west of the site and that flows only perennially past the FCEP facility and then ephemerally in the eastern part. This month is October, and prior to that very little storm activity with rain has fallen. Typically I have seen ground seepage in the area with enough for cattle to drink out of on [a] near annual basis....what, if any, surface [contaminants] may even possibly be rendered to the surface for cattle, mule deer or any other wildlife animal that may pose any potential threat or harm for health or life? Or to water [drawn] down from those sources drying up?”

Response 3.18: For clarity, the Fact Sheet states that Fire Creek, not Fire Creek Mine, is fed by multiple springs. However, the Permit application does not document any surface water east of the mouth of Fire Creek canyon or downgradient of the RIB site. The Permit has been modified in Part I.B.2 to require an investigation for surface water bodies prior to the commencement of infiltration. Part I.D.5 has also been added to require quarterly monitoring for any such bodies, including water quality analyses. If the permitted infiltration activities cause the formation or degradation of a surface water body, the Permittee must report a Permit violation and take approved action to correct the problem. Water supply issues, such as drying up of natural springs, are regulated by the Nevada Division of Water Resources.

Comment 3.19: “12. Klondex Fact Sheet, pg 3, par 5, Hydrologic section speaks of the percolation test and hydrologic conductivity, i.e., the ability of the ground to allow flow of water is my understanding that the alluvium would allow a much more rapid rate of flow and the basaltic andesite is considerably reduced? This also would appear to bottleneck flow pending where this basaltic layer is in relation to the flow. I would like to have this part explained because without any charts, maps, profile views it is difficult if not impossible to imagine groundwater flow in relation to this rate of calculation. This also COULD suggest that there is a strata below the surface to which water will not permeate and will have a more horizontal flow as compared with a more vertical drainage. As with the next paragraph being presented with MODFLOW data and explanations would help.”

Response 3.19: The commenter is correct that the flow rate of the infiltrating water is expected to be greater in the alluvium than in the basaltic bedrock, because the alluvium has a greater hydraulic conductivity. Regarding other subsurface strata that may form a barrier to downward infiltration, a deep caliche layer was noted at 140 feet bgs during the installation of monitoring well GW-3. If this caliche layer is present at the RIB location and forms a continuous barrier, it could divert some of the infiltrating water along a preferential horizontal flowpath within the alluvium. The Permit application does not include MODFLOW simulations of this hypothetical layer.

However, Part I.B.1 of the Permit has been modified to require the Permittee to notify the Division if low permeability layers are intercepted during the installation of monitoring wells GW-4, GW-5, and GW-6 that may alter predictions regarding the development of the infiltration mound and/or the effectiveness of approved monitoring points. Based on the available information, the Permittee must then implement an approved plan (for example, updating the hydrologic model to determine the impact to downgradient users, or installing additional monitoring wells) to address Division concerns prior to commissioning the RIBs.

Comment 3.20: “13. Klondex Fact Sheet pg 3, par 6, and pg 4, par 1. [Page] 3 says that to simulate and investigate the development of an infiltration mound....the model was run for a simulated time period of ten years and using an average of 1,500 gpm rate. Pg 4, par 1 then says this corresponds to the maximum average discharge rate modeled over the entire expected mine life and that the modeled mound is likely much larger than the real mound that will form. I must call objection here. The stated permitted flow rate was said to be 4,320,000 gallons per day. At 3,000 gpm. If the model NEVER takes this into consideration at all and is manipulated to have a flow of only HALF and the projected model STILL SHOWS a projected mound that is LARGE this suggests to this [layman] that the data is erroneous already and being manipulated to simply allow the passage of the permit....What is to happen once the mine life [has] run its course and the mine is closed and shut down, what happens to this water that they have now discharged?....this is near 7.8 billion gallons of water that now has no place to go? Evaporation will not explain it away....”

Response 3.20: As stated in Division Response 3.4, the discharge rate limits in the Permit have been reduced, so the actual infiltration mound is expected to be much smaller than the modeled mound. The maximum rate limit allows the discharge rate to spike up as high as 2,160,000 gallons per day, but continuous discharge at the maximum rate is not allowed, as it would cause a violation of the 30-day discharge limit. Therefore, it is appropriate to use the 30-day limit to calculate maximum long-term flow volumes allowed by the Permit. After the infiltration stops, the infiltration mound is predicted to gradually flatten out and migrate slowly downgradient. It is during this time, in year 14, four years after the predicted cessation of infiltration, that the maximum 4.2-foot rise in static water elevation in the nearest residential well is predicted to occur. After that, water elevations in downgradient residential wells will gradually decrease to pre-infiltration levels, as modified by any other water uses unrelated to the Permit that may also impact water levels. The Permittee is required to maintain the Permit until groundwater elevations stabilize and the Division approves final closure.

Comment 3.21: “14. Klondex Fact Sheet pg 4, par 2, further goes on to say that additional modeling was conducted to estimate ground water rise. They used the Same 1,500 gpm flow rate and ten year period showed only a 4.2 [foot] rise in Groundwater level.... However, if this were at the rate the permit is for, that would suggest, all things being equal of course, that the ground water level would rise by not 4.2 feet but by perhaps

8.4 feet in the nearest well to the mine and then what? By 20 feet or more near hwy 306?”

Response 3.21: As explained in Division Response 3.20, the 30-day discharge rate limit, not the maximum rate limit, is the appropriate discharge rate to use for long-term modeling and calculations.

Comment 3.22: “....I feel that one possibility for the mine would be to either pipe the water out of the valley or run a pipeline project into the Lander County side and keep such out of the Crescent Valley basin aquifer altogether. The intent is to generate and ask enough questions to get a basis and understanding and without forfeiture or waiver of any right to future concern or claim, we would respectfully reserve any future concerns for comment or question not addressed herein.”

Response 3.22: Comment noted.

4. Letter from J. J. Goicoechea, Chairman, Eureka County Board of Commissioners, received 8 November 2013 via email and facsimile, and 12 November 2013 via standard mail.

Comment 4.1: “Eureka County supports mine water management programs [that] return the groundwater pumped to dewater mine workings to the aquifer(s) in the basin of origin. The dewatering management system proposed by Klondex...for its Fire Creek Project...is, in concept, consistent with the County’s Land Use Master Plan and Ordinances. The location of the...RIBs a short distance directly up-gradient of domestic water supply wells and a similarly short distance obliquely up-gradient of the County’s public water supply wells for the community of Crescent Valley begs closer scrutiny...by the Bureau of Mining Regulation and Reclamation (Bureau) than a mining operation that is farther from these water supplies.”

“It is the County’s opinion that the proposed monitoring program for the project goes a long way toward protecting the chemical quality of the groundwater that serves County residents in this area, and therefore, the health and welfare of its citizens. The permit conditions require that all water delivered to the RIBs must meet the applicable Drinking Water Standards (DWS). It is our understanding that if this water does not meet any DWS, then it must be treated to the point it meets the standards. That permit requirement is the first line of defense against degradation of the groundwater resource.”

Response 4.1: It is correct that the Permit requires the discharge water to meet Profile I drinking water standards and to be free from any other pollutants that have a potential to degrade waters of the State or to adversely affect the performance of the RIBs.

Comment 4.2: “The second line of defense against degradation of the groundwater comprises the two monitoring wells (GW4 and [GW]5) located a short distance east of the RIBs. If properly constructed, these wells should provide early warning of degradation of the groundwater in the aquifer in time for the Bureau to compel the mining company to comply with the zero degradation condition of the permit before wholesale degradation occurs. However, if the groundwater at this locale is degraded, a plume would migrate eastward toward nearby residential wells, even if operations cease as soon as the plume is detected. The permit application submitted by Klondex did not appear to have addressed the migration of a plume from a one-time incident. Granted, the plume will disperse as it migrates to the east, but as analyzed, we are not satisfied that the natural process of dispersal and dilution would adequately ameliorate groundwater degradation. The County requests that further analysis be conducted so that the Bureau can determine, in advance, what must be done to effectively remediate the plume before it impacts down-gradient users.”

Response 4.2: Part I.B.3 was added to the Permit to require an updated Emergency Response Plan. The Emergency Response Plan must include remedial actions to clean up any degraded groundwater and prevent it from migrating downgradient and impacting downgradient users.

Comment 4.3: “An additional groundwater monitoring well (GW6) is proposed at a location approximately 1.5 miles east of the RIBs. This well will help to determine the extent of the groundwater mound east of the RIBs and will provide a baseline for the chemical quality of the aquifer. However, it does little to protect the residents because if it detects degradation, the sheer volume of water already degraded will be enormous and it will be difficult to remediate the problem in order to protect the nearby residents. Furthermore, it will not provide direct evidence of degradation, or no degradation for that matter, of the water supplies developed from residential wells. For this reason, the County requests that residential wells be incorporated into your monitoring network. Monitoring of these wells should commence as soon as practicable to provide an adequate base line. There are at least two residents who have voiced an interest in having their wells included into the monitoring network and the County can provide you with the contact information upon request.”

Response 4.3: The Division cannot require the Permittee to monitor residential wells on private property, however, the Permittee has indicated that it may do such voluntarily. The locations for the three required monitoring wells downgradient of the RIBs have been modified as follows to provide monitoring closer to the residential wells: GW-4 will be slightly further south than the previously approved location, just east of the midpoint between the two RIBs; GW-5 will be at the former location for GW-6, near the county line, approximately 1.4 miles east-southeast of the RIBs and 1.1 miles west of the closest residential well; and GW-6 will be located just west of the residential area and just inside the eastern limit of Section 20, Township 30 North, Range 48 East.

Comment 4.4: “The depth to groundwater beneath the RIB site is about 580 feet below the land surface.”

Response 4.4: The depth of groundwater below the RIB site will be determined when monitoring well GW-4 is installed nearby. The static water depth at existing monitoring well GW-3, located approximately 2,500 feet southwest of the RIB site, is approximately 479 feet below the ground surface, based on data from monitoring reports.

Comment 4.5: “The soils have been investigated to a depth of about 100 feet in order to assess the potential for undesirable chemical constituents to be leached by the effluent from the RIBs. Testing in support of the permit application shows that the first flush of water from the shallow soils will result in dissolution of arsenic. It appears to be the Bureau’s opinion that the alluvial deposits below the depth investigated to date will not be leached of arsenic by the effluent. However, a review of the permit application by the County’s hydrogeological consultant and his discussions with you suggest that this opinion is based on analysis of soil samples collected from relatively shallow depths and that no actual analysis of the potential for arsenic to be leached has been completed for the approximately 480 feet of unsaturated sedimentary deposits below a depth of 100 feet. The County respectfully requests that additional samples throughout the unsaturated zone down to the water table be collected and subjected to testing to thoroughly assess the potential for arsenic to be leached from the deeper soils.”

Response 4.5: The primary conclusion from leach test results and electrical conductivity analyses in the Permit application is that soluble salts of arsenic, chloride, magnesium, sulfate, and total dissolved solids (TDS) are present in the shallow sediments in amounts that could cause groundwater degradation if water were allowed to infiltrate through them, but the deeper sediments below about 30 feet have very little soluble salts in them and would therefore have very little potential to degrade groundwater. Specifically, a leach test performed on alluvium from a depth range of 20 to 100 feet below the surface met all Profile I drinking water standards, except for one arsenic value of 0.011 mg/L, which is slightly above the 0.01 mg/L arsenic reference value. That arsenic exceedance occurred only in the first pore volume flush, after which the arsenic concentration fell below the reference value for the remainder of the leach test. Furthermore, that leach test included the more salty alluvium from between 20 and 30 feet below the surface. The Permit has been revised to require excavation of the RIBs to a minimum depth of 30 feet, instead of 20 feet as stipulated in the draft Permit, to minimize leaching of the more salty alluvium.

Comment 4.6: “The County also has concerns over the ability of the RIBs to function as predicted. RIB performance was analyzed by a very simplistic groundwater flow model. A soil boring at the site reported a caliche layer at a depth of 140 feet below the land surface. Caliche is relatively impermeable and, if laterally extensive, this layer or a

series of discontinuous layers can detrimentally affect the infiltration of the effluent from the RIBs. Wells drilled by the County for the Town of Crescent Valley clearly show that layers or lenses of impermeable geologic materials are common. Under the influence of impermeable strata or lenses, the effluent would have a tendency to migrate laterally above the less permeable material, rather than downward, rendering the nearby monitoring wells ineffective at detecting degradation of the groundwater. To better assess the effects of low-permeability layers or lenses in the thick sequence of alluvial deposits, the County requests a more comprehensive hydrogeologic investigation. Such an investigation might entail additional borings east of the RIB sites to document the horizontal and lateral distribution of low permeability materials in the subsurface. The data from these borings should be used to enhance the groundwater model to improve its predictive value. The results of the model might then be used to modify the monitoring network designed to improve the chances the groundwater resource is not degraded and that the health and welfare of Eureka County's residents are protected. This drilling and sampling program could be conducted in conjunction with the efforts to better assess the leaching potential for the deeper sediments mentioned above...."

Response 4.6: Please see Division Response 3.19.

The following oral comments were received during a 09 December 2013 public hearing in Crescent Valley, Nevada.

5. Oral comment from Dale Bugenig, hydrogeologist, consultant for Eureka County Board of Commissioners.

Comment 5.1: "...I formulated some questions that the commissioners put into a letter, comments regarding the draft permit, and then submitted it to Mr. Gray. And, I think, I recognize some of the changes that were made to the draft permit that, I think, were made by, been prompted by the commissioners, commissioners' letter...."

Response 5.1: Comment noted.

Comment 5.2: "And, I think, the permit is a ... starting point and that ... the monitoring program that is being proposed is a starting point. And most monitoring plans that I've been involved with sort of evolve over time as data become available. And I believe that there is some flexibility for the state to modify the monitoring plan."

Response 5.2: Comment noted.

Comment 5.3: "... my primary concerns really were with the groundwater model that was developed to predict how the mound was going to behave. And I recognize that there is not a lot of data, and it's a first approximation. But ... that caliche layer that was identified in the 140 feet caused me a little bit of concern."

"I've also been involved in the construction of at least two of the wells here for the town, so I'm familiar with the subsurface geology. And I've actually logged the holes myself. So I can see how the permeability changes with depth. ... it can be fairly non-homogeneous...."

"And I have had the opportunity to do, I guess, forensic investigations of rapid infiltration basins that have failed. And the classic cause of failures is low permeability zones that did not show up or weren't accounted for in the analysis."

"So I do like the one modification to the permit that called for a review of the analysis of the permit and the modeling that was done if caliche beds are identified in the ... monitoring holes, wells that are to be determined."

Response 5.3: Comment noted.

Comment 5.4: "Now ... the county, I know, was concerned about the actual water quality at the residential areas. Because here are the constituents of the commissioners "

"... I like the idea of being able to monitor residential wells, because then you have -- that helps to alleviate people's concern. But I also understand the state can't compel the applicant to monitor them. So moving one of the monitoring wells right to the nearest domestic wells, residential wells, I think, that's a good change to the permit."

"And as Mr. Gray indicated, you know, how many monitoring wells is enough I hope there's flexibility in the program to adapt, have adaptive monitoring As things change, we want to have that flexibility in the permit to track down these kinds of changes."

"So, again, I think, the county's primary concern was ... this is my interpretation, because I can't speak for the commissioners. But this is the sort of information that I relay back to them. I think, the modification of the monitoring program to get one closer to the domestic wells, I think, is a good addition."

Response 5.4: Comment noted.

Comment 5.5: "Having an opportunity, your -- what did you call it, Tom? Did you call it -- or Sawyer? Contingency plan? ... If something shows up, having the monitoring wells far enough away to address a problem, I think, knowing ahead of time what that contingency is. And an analysis of what happened. Say, you infiltrate for six months or a year, and something shows up that causes degradation, you know ... how do you ... rectify it, and how do you remediate it, so, ... having the analysis done of the impact to the nearest users, having that pointed out ahead of time, I think, is an important addition."

“And ... did I interpret it right, that you, in your contingency plan, you're going to have some kind of analysis of how you remediate a problem if it does occur, not just the enforcement action, but the remediation, and how do you protect the downgradient users?”

Response 5.5: That is correct; please see Division Response 4.2.

Comment 5.6: “... The one thing ... that caused me a little bit of concern is that there had been quite a bit of testing down there about a hundred feet, you know, the potential to leach these deleterious or possibly deleterious constituents, things like we're concerned here about iron, manganese, arsenic, in particular.”

“You know, it was analyzed in some detail down to about a hundred feet. But ... the one ... little conceptual cartoon cross-section showed several hundred feet of material below the area that's already investigated down to the water table.”

“To me, it makes sense, as they drill these monitoring wells, ... to be able to take samples of some of those deeper sediments. Because the assumption that's made is ... you saw that little graph that showed the TDS in the water that was leached goes down to almost a constant value. We don't know what's below a hundred feet.”

“So a recommendation would be to do some further testing of those deeper alluvial deposits - I won't call them soil, but alluvial deposits, to have a better understanding of what might be leached, and maybe not just look at TDS, look at some of the trace elements....”

Response 5.6: The Permittee has agreed to sample and characterize each different type of material intercepted while drilling monitoring well GW-4.

6. Oral comment from Virgil Roper of Crescent Valley, Nevada.

Comment 6.1: “... My concerns are if this - is this tied into any of kind of an EIS report, environmental impact report, that we could get our hands on to read?”

Response 6.1: Environmental Impact Statements apply only to federal actions, and are unrelated to the issuance of this State Permit.

Comment 6.2: “And, also, I have a lot of questions about there's not enough data to support the assumptions that are being made. I've worked in mining a whole bunch of my life and assumptions. And you can ask that of you and me. And they never go the way we predict they're going to go. I've never seen it work out that way.”

“And I'm very concerned, because I am one of those guys right at the bottom of the hill. I want to know if there's going to be any bonding requirements, so that they can -

if something does happen, ... what can we fall back on, except \$25,000-a-day violation that the state gets? What do we get?....”

Response 6.2: If groundwater is degraded, the Division will require the Permittee to correct the problem; see Division Response 2.1. Bonding is outside of the purview of the subject Permit.

7. Oral comment from Robert Nelson of Crescent Valley, Nevada.

Comment 7.1: “.... I'm concerned about being a landowner and the future of my land. What's it going to be like if this, as Virgil pointed out, this whole thing goes awry?”

Response 7.1: Please see Division Response 2.1.

Comment 7.2: “Personally, I don't see how you can monitor 4.3 million gallons a day. How do you do that?”

Response 7.2: Please see Division Response 3.4 regarding maximum authorized discharge rates. The Permit requires daily monitoring of the discharge rate via flow meters with totalizers, monthly monitoring of subsurface water elevations via monitoring wells and piezometers, and monthly and quarterly monitoring of water quality via analyses by a Nevada-certified laboratory.

Comment 7.3: “.... I'm 65. If I'm 70 living in a swamp, what am I going to do? What, are you guys going to buy me out? Again, I don't want to move....”

Response 7.3: Please see Division Response 3.12.

8. Oral comment from Cathy Wolf of Crescent Valley, Nevada.

Comment 8.1: “I own property out on 11th Street. ... I don't have a well out there yet. But one of the questions was brought up on where we could get our own wells tested. And to have it tested before I drill a well, or where can we go to get the water tested so we can keep track of it ourselves? Where can we go? Through the state? Through -- it'll probably be at our own expense. But where can we get our own water tested?”

Response 8.1: Please see the laboratories listed under the SDWA (Safe Drinking Water Act) tab on the Nevada certified lab list available at: <http://ndep.nv.gov/bsdwlabservice.htm>.

9. Oral comment from Forest Anderson of Crescent Valley, Nevada.

Comment 9.1: “.... You need to get us better information, better communication between you guys and the mine and us. And what happens? We live here. You guys go back to Carson City and call it good. We live here. We want to know, hey, we wake up one

morning, and our house is six feet below ground, we don't want sit hearing you guys saying, 'Oops.' You know, we want to know. A warning system, something...."

"You know, what contingency programs do you guys have in the event this mine has a disaster? Because you guys want to, you want to just - you guys cover a broad area. You know, if houses started sinking, the hillside collapses because of the hole they're putting in the ground for the -- basically, I call it the drain. You know, there's all kinds of stuff that can go wrong with this project."

"You're getting ready to permit. I want to know what you're going to do to cover my butt. I didn't have to go out and watch it go under, and I bought before it went in...."

Response 9.1: Regarding contingency plans, please see Division Responses 2.1, 3.6, 3.12, and 4.2.

10. Oral comment from Shirley Anderson of Crescent Valley, Nevada.

Comment 10.1: "If something does go wrong, that's on this, and these people lose their homes, who is responsible, the mine or you people? I mean who would, you know, reimburse these people?"

"I live out, you know, south of town, and I don't like to worry about (indistinct) doing something again. But if, if, like Forest said, if he wakes up, and his house is in a hole, is it your fault, or is it the mine's fault?"

Response 10.1: The Permittee is responsible for complying with applicable statutes and regulations, and with the Permit.

11. Oral comment from Mark Sharkozy of Crescent Valley, Nevada.

Comment 11.1: "... I'd like to make sure there's maybe a periodic test by an independent company, that comes in and tests the water, that doesn't allow a company that's looking out for themselves and not anybody else..."

Response 11.1: The Permittee is required to provide samples to a Nevada certified laboratory for analysis. The sampling locations and methods must conform to requirements in Parts I.D and II.E of the Permit.

Comment 11.2: "...they've proven that they have not looked out for anybody else, by not allowing us to know this meeting was going on, except for a Battle Mountain newspaper article and a letter to myself. Had it not been for me, I think, a lot of people wouldn't have gotten even a notification of this had we not told them."

Response 11.2: Please see Division Response 3.3.

Comment 11.3: “So I don't see the mine looking out for us. They look out for themselves. And that's understandable. They got to make money. But I do want to make sure that there's something in place that says, ‘Okay. I'm big brother. I will take a look at your water on my own once in a while.’ Or occasionally. Maybe not every quarter. I understand. But, you know, just so that there's some other form of third party, you know, that doesn't have anything to do with us or the mine and the state, and just can come in there and test the water and say, you know, ‘Yep, they're doing the right thing....’”

“I have no problem with that, but that's what I'd like to see, at least some other form of protection for us, on their dewatering.”

Response 11.3: Please see Division Response 11.1.

12. Oral comment from Forest Anderson of Crescent Valley, Nevada.

Comment 12.1: “.... My comment would be maybe you should have a resident. You know, you were telling me earlier about the chain of command you guys have, the chain of evidence going along through there. Well, what would it hurt to have one or two of the residences go along with you guys when you go out there to do your random sample, and have somebody, one of the residents or several resident, standing right there when you take it and sign it, and sending that along with it.”

“That might be something you want to look at That ... might help a little bit.”

Response 12.1: The Division does not have the authority to allow residents access to a permitted facility. Such an agreement would be up to the Permittee and the residents.

13. Oral comment from Virgil Roper of Crescent Valley, Nevada.

Comment 13.1: “.... I've seen, out at Cortez, I've seen the same thing up at Gold Strike. The boss water truck comes up with the good drinking water to dump in the tank, and they go over and pull their samples and go (whiffle sound), sign them. Somebody else signs them. And they send them off....”

Response 13.1: Comment noted.

14. Oral comment from Robert Nelson of Crescent Valley, Nevada.

Comment 14.1: “... But at what point ... do the residents have some kind of importance? I mean, me and the other people in this room are very much like the people that founded this state. We're tough. I mean we - you know, 20 below, yeah, we'll take it.”

“I live here because I love it. I've heard that said from other people. I've put up with this highway. Which when I first came out here, if you saw three cars on the highway any given day, and it's, you know, like, “Wow, where's the party?” Now it's almost unnavigatable. Okay. Not. But it's very crowded and very dangerous.”

“And at what point? I'm not asking you this, ma'am. I'm not asking any of you folks. It's more of a rhetorical question. At what point do the residents mean something to the state?”

Response 14.1: Comment noted.

15. Oral comment from Mark Sharkozy of Crescent Valley, Nevada.

Comment 15.1: “... I've pleaded with Klondex on many occasions, and we've talked, and we've got a rapport together. But one thing that they have failed to do that I feel they need to do is have more community-based information for us and maybe more knowledge given of what we're doing type, I don't know, not every day, obviously, but something that with a mine, if they're going to do this watering.”

“You know, we didn't know about this unless we got lucky to get a letter. We didn't. We don't know what's going on up there. Nobody knows what they do up there, except for what is told of us, if there's anything.”

“So I would also like to say that for a mine to be doing what they're doing up there, that they should also have a little bit more responsibility for the community that they're impacting, not the county that they're not impacting, that they're, you know, I don't know, hiding behind or whatever you want to call it. This is Eureka County, and it does impact us. They have to go through our property to get to their property. There's a lot of issues, I believe, that - not only the dewatering, but just the communications with the mine....”

Response 15.1: Individuals may sign up to receive public notices related to water pollution control and reclamation permits for Nevada mining facilities of interest by visiting the following Division website: <http://ndep.nv.gov/bmrr/bmrr01.htm#mail>.

16. Oral comment from Curtis Hill of Crescent Valley, Nevada.

Comment 16.1: “.... the communication here in Crescent Valley, as far as getting news, we don't really have that. But I learned this morning (indistinct) from the bulletin board down near the mailboxes. There's a letter. There's two letters (indistinct) four, posted on the bulletin board down near the mailboxes, stating that this here permit, this meeting, also of the tour that they had of the mine, to be able to go up and participate and look at what they're doing.”

“And I did, I took that advantage, and I did take that tour. And what they've done, to me, is amazing. I used to mine years ago, when I was fresh out of high school. And it's just completely different than what they're doing now. I mean if we had to go through all the things that they have to go through, of water qualifications and everything, back then, if you'd taken a shovel and an ore cart, [you] wouldn't have been able to mine. Period.”

“But the communication problem here is we have a bulletin board down here at the post office, at the postal pick-up place and city hall It's there, though.”

“.... it's hard to get information with no newspaper. If you do get a newspaper, that's Battle Mountain, Elko. And you get anything on TV, it's Utah. It ain't right here local. So, you know, we are in the dark, as far as communication. We just need a little bit more of it.”

Response 16.1: Please see Division Response 15.1.

17. Oral comment from Joan Roper of Crescent Valley, Nevada.

Comment 17.1: “.... We just got our wells”

“And we expect our water quality to be what it is now, not what state minimum standards are. That's not why we drilled them.”

Response 17.1: Please see Division Response 1.2.

18. Oral comment from Forest Anderson of Crescent Valley, Nevada.

Comment 18.1: “.... We choose, for whatever reason we have, don't want it, because of service, or whatever. So, I mean short of Pony Express mail, that's about the only way a lot of us are going to hear what you guys are doing now.”

“The mine, we know more about this, the moly mine down south, which is a hundred and some miles from us, than we hear about what you guys and Klondex is doing literally in our backyard.”

“So, you know, you need to maybe look at the communication problem here real closely. Because there's like three mail drops. And, you know, some people come into

town to get their mail. Some people -- I don't have to come into town but maybe once a month, if I'm lucky, if I really didn't want to come in."

"Meanwhile, you guys sneak these meetings in. We don't hear about them. I mean, you know, you need to at least send out -- get the addresses."

"Right now, we're going through a little topsy-turvy on our mail, and because they just switched, we lost our post office. They're switching everything over to boxes. So not everybody's going to the mailbox drop or coming into the city hall, or run over to Lander County and take a look at their newspaper, or going into Elko."

"You know, you're going to have to start looking on the local level, maybe sending somebody from your outfit out to talk to the people that are there. You see somebody walking down the street, "Hey, you know, you know, we're going to be having a meeting." You know, it works. It still works, spreads like wildfire once we find something."

"But you got to tell somebody or send them a letter. You can't just assume that everybody has computers and iPhones and smart phones and Google phones, and all of the other things."

"... Well, my basic comment was, is you should be notifying the people that they're literally where it affects right in their backyard."

Response 18.1: Please see Division Response 3.3.

The following additional written comments were received after the 09 December 2013 public hearing.

19. Letter from Robert Nelson of Crescent Valley, Nevada, received 12 December 2013 via email.

Comment 19.1: "I ... am deeply concerned about the impact of this proposed project will have on the local environment. I am concerned about the potential quality of the water in my well, as well as its integrity."

Response 19.1: Please see Division Response 1.2.

Comment 19.2: "I am concerned about the future stability and integrity of the land I walk on."

Response 19.2: Please see Division Response 3.2.

Comment 19.3: "The lack of any meaningful study of the impact of this project and the lack of humility before nature staggers the imagination."

“Also disturbing is the apparent [disregard] for residents and land owners in Crescent Valley by Klondex. We are, to them, a [inconvenient] reality, a bump in the road of their progress. Klondex is not even an American owned Co. I am told China has a significant financial interest in Klondex. Is this true? Who..., is being considered to impact an [entire] valley in the great state of Nevada?....”

Response 19.3: The Permittee is a domestic corporation registered with the Nevada Secretary of State.

Comment 19.4: "Why has no Federal Environmental Impact Study been done?"

Response 19.4: Please see Division Response 6.1.

Comment 19.5: "Why has no performance bond been posted?"

Response 19.5: Please see Division Response 6.2.

Comment 19.6: "... Do outside monies influence the environmental protection of Nevada?"

Response 19.6: The source of an applicant's project funding is not considered during the permitting process.

20. Letter from Virgil and Joan Roper of Crescent Valley, Nevada, received 12 December 2013 via email.

Comment 20.1: "After attending the public hearing, we have other concerns that were not addressed, other than water quality. We have learned that there is a fault line under the proposed infiltration of the RIBS. We are concerned about the effects of placing up to thirty million pounds of weight per day into the aquifer above the fault line, which contains numerous active and inactive hot springs."

Response 20.1: No evidence of faulting at the RIB location was provided in the Permit application. Part I.B.1 of the Permit has been revised to require the Permittee to notify the Division if, while drilling the RIB downgradient monitoring wells, any hydrogeologic feature is intercepted that may alter predictions regarding the development of the infiltration mound and/or the effectiveness of approved monitoring points. An approved plan must then be implemented, if required by the Division, prior to commissioning the RIBs.

Comment 20.2: "Because of these concerns, we feel that a full EIS assessment from the federal government should be completed before any permit is issued. We also feel that there is not enough information about the aquifer in the affected area. The data submitted by the Klondex Mine should be confirmed by your department or a third party."

Response 20.2: Please see Division Response 6.1.

Comment 20.3: “We and our neighbors do not feel that our water should have any chance of being degraded. We deserve to have the same quality of water now as we did when our wells were drilled. The minimum State level is not acceptable.”

Response 20.3: NAC 445A.424 prohibits a facility from degrading groundwater to the extent that the quality is lowered below a state or federal standard for drinking water.

Comment 20.4: “If the permit is issued, there should be a stipulation that Klondex Mine should pay for testing of all residential wells, before and during operations. The homeowners would send in the samples on a quarterly basis.”

Response 20.4: Please see Division Response 4.3.

Comment 20.5: “We feel that a Performance Bond large enough to cover any damages to both property and water quality should be a requirement before the permit is considered. We are concerned that the Klondex Mine, being small in size and Canadian owned could pack up and shut down at any time, leaving us with no recourse for recouping any losses.”

Response 20.5: Please see Division Response 6.2.

Summary of Permit revisions made since the 16 October 2013 Notice of Proposed Action

Front Page and Part I.G.5: The maximum discharge rates were changed from 4,320,000 gallons per day and 64,800,000 gallons in any 30-day period, to 2,160,000 gallons per day and 43,200,000 gallons in any 30-day period.

Part I.B.1: The monitoring well installation date was changed from 01 December 2013 to 25 April 2014, and requirements were added for supervision of well installation, notification of the Division if low permeability layers or other hydrogeologic features are encountered, and implementation of an approved plan prior to commissioning the RIBs, if warranted. A revision to the Permit application also adjusted the monitoring well locations so well GW-6 will be closer to the residential area.

Part I.B.2: This item was added to require submittal of a report by 30 May 2014 that identifies and characterizes all accessible surface water bodies and dry areas with wetland soils or vegetation in a large area downgradient and cross gradient to the RIBs.

Part I.B.3: This item was added to require, along with the as-built report for the facility, a revised Emergency Response Plan that describes actions to be taken in the event that groundwater degradation is discovered.

Part I.B.4: This item was added to require submittal of a revised hydrologic and chemical model of the infiltration mound with Permit modifications and renewals.

Parts I.D.5 and I.D. Footnote (2): These new items require quarterly monitoring for surface water bodies downgradient and cross-gradient from the RIBs.

Part I.G.2: The minimum depth of the RIBs was increased from 20 feet to 30 feet.

Part I.G.7: The minimum depth of the infiltration mound below the ground surface was increased from 30 feet to 40 feet in response to the greater RIB depth. Also, the formation of sinkholes and liquefaction were prohibited.

Part I.M: This standard item was added regarding dust suppression activities.

Parts II.B.1.a and II.B.1.b: The reporting requirements were revised to correspond with the revised monitoring at Part I.D.5.

Part II.F.2: Minor revisions were made.